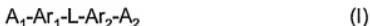


IN THE CLAIMS:

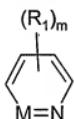
Please amend the claims as follows:

1. (Currently amended) A method of treating a trichomoniasis infection in a subject in need thereof, the method comprising administering to the subject an effective amount of a compound of Formula (I):

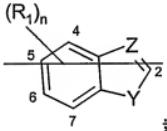


wherein:

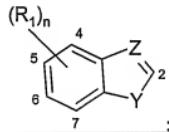
Ar<sub>1</sub> is and Ar<sub>2</sub> are each independently selected from the group consisting of:



and



Ar<sub>2</sub> is:



wherein:

M, N and Z and N are each independently selected from the group consisting of N and CH;

Z is N;

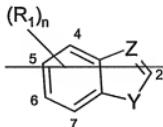
Y is selected from the group consisting of NR<sub>3</sub>, O, S, Se, and Te, wherein R<sub>3</sub> is selected from the group consisting of H, alkyl, and substituted alkyl;

each m is independently an integer from 0 to 2;

each n is independently an integer from 0 to 3;

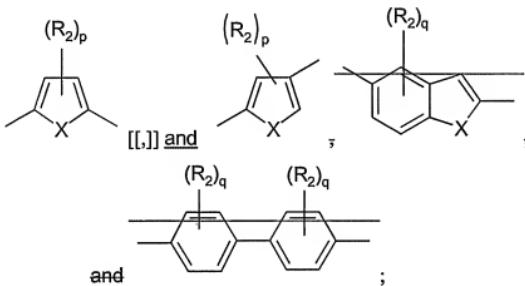
each R<sub>1</sub> is independently selected from the group consisting of alkyl, substituted alkyl, halo, hydroxyl, alkoxy, aryl, substituted aryl, aryloxy, and aralkyloxy; and

wherein if  $\text{Ar}_1$  or  $\text{Ar}_2$  is:



$\text{Ar}_1$  or  $\text{Ar}_2$  is attached to L through a bond at carbon 2;

L is selected from the group consisting of:



wherein:

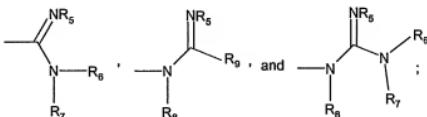
p is an integer from 0 to 2;

each q is independently an integer from 0 to 4;

X is selected from the group consisting of O, S,  $\text{NR}_4$ , Se, and Te, wherein  $\text{R}_4$  is selected from the group consisting of H, alkyl, and substituted alkyl;

each  $\text{R}_2$  is independently selected from the group consisting of alkyl, substituted alkyl, halo, hydroxyl, alkoxy, aryl, substituted aryl, aryloxy, and aralkyoxy; and

$\text{A}_1$  and  $\text{A}_2$  are each independently selected from the group consisting of:



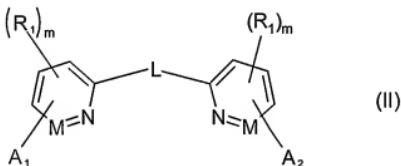
wherein:

$R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ , and  $R_9$  are each independently selected from the group consisting of H, alkyl, substituted alkyl, cycloalkyl, aryl, substituted aryl, aralkyl, hydroxyl, alkoxy, hydroxyalkyl, hydroxycycloalkyl, alkoxy(cycloalkyl, aminoalkyl, acyloxy, alkylaminoalkyl, and alkoxycarbonyl; or

$R_5$  and  $R_6$  together represent a  $C_2$  to  $C_{10}$  alkyl,  $C_2$  to  $C_{10}$  hydroxyalkyl, or  $C_2$  to  $C_{10}$  alkylene;

or a pharmaceutically acceptable salt thereof.

2. (Withdrawn) The method of Claim 1, wherein the compound of Formula (I) comprises a compound of Formula (II):



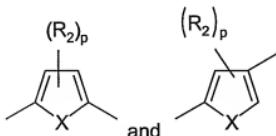
wherein:

each M and N is independently selected from the group consisting of N and CH;

each m is independently an integer from 0 to 2;

each  $R_1$  is independently selected from the group consisting of alkyl, substituted alkyl, halo, hydroxyl, alkoxy, aryl, substituted aryl, aryloxy, and aralkyloxy;

L is selected from the group consisting of:



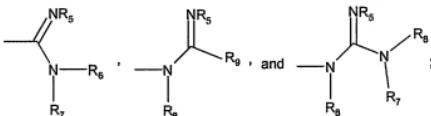
wherein:

$p$  is an integer from 0 to 2;

each  $R_2$  is independently selected from the group consisting of alkyl, substituted alkyl, halo, hydroxyl, alkoxy, aryl, substituted aryl, aryloxy, and aralkyloxy;

$X$  is selected from the group consisting of O, S,  $NR_4$ , Se, and Te, wherein  $R_4$  is selected from the group consisting of H, alkyl, and substituted alkyl; and

$A_1$  and  $A_2$  are each independently selected from the group consisting of:



wherein:

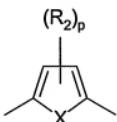
$R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ , and  $R_9$  are each independently selected from the group consisting of H, alkyl, substituted alkyl, cycloalkyl, aryl, substituted aryl, aralkyl, hydroxyl, alkoxy, hydroxylalkyl, hydroxycycloalkyl, alkoxyycloalkyl, aminoalkyl, acyloxy, alkylaminoalkyl, and alkoxy carbonyl; or

$R_5$  and  $R_6$  together represent a  $C_2$  to  $C_{10}$  alkyl,  $C_2$  to  $C_{10}$  hydroxylalkyl, or  $C_2$  to  $C_{10}$  alkylene;

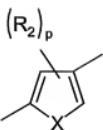
or a pharmaceutically acceptable salt thereof.

3. (Withdrawn) The method of Claim 2, wherein M and N are each CH.

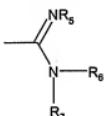
4. (Withdrawn) The method of Claim 2, wherein L comprises:



5. (Withdrawn) The method of Claim 2, wherein L comprises:

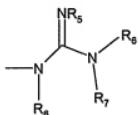


6. (Withdrawn) The method of Claim 2, wherein X is oxygen.
7. (Withdrawn) The method of Claim 2, wherein A<sub>1</sub> and A<sub>2</sub> each comprise:



and wherein R<sub>6</sub> and R<sub>7</sub> are independently selected from the group consisting of H, alkyl, substituted alkyl, and cycloalkyl; and R<sub>5</sub> is selected from the group consisting of H, hydroxyl, and alkoxy.

8. (Withdrawn) The method of Claim 2, wherein A<sub>1</sub> and A<sub>2</sub> each comprise:

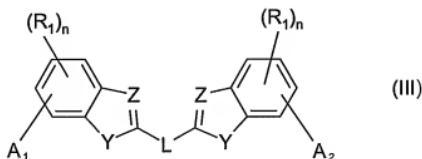


and wherein R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, and R<sub>8</sub> are each H.

9. (Withdrawn) The method of Claim 2, wherein the compound is selected from the group consisting of:

2,5-Bis(4-amidinophenyl)furan;  
2,5-Bis[4-(O-methoxyamidino)phenyl]furan;  
2,5-Bis[4-(N-isopropylamidino)phenyl]furan;  
2,5-Bis[4-(N-cyclohexylamidino)phenyl]furan;  
2,5-Bis(4-guanidinophenyl)furan; and  
3,5-Bis(4-amidinophenyl)furan.

10. (Withdrawn) The method of Claim 1, wherein the compound of Formula (I) comprises a compound of Formula (III):



wherein:

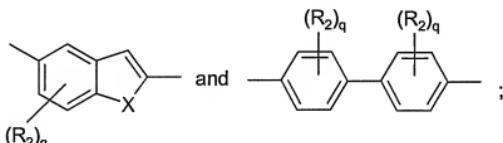
Y is selected from the group consisting of NR<sub>3</sub>, O, S, Se, and Te, wherein R<sub>3</sub> is selected from the group consisting of H, alkyl, and substituted alkyl;

Z is selected from the group consisting of CH and N;

each n is independently an integer from 0 to 3;

each R<sub>1</sub> is independently selected from the group consisting of alkyl, substituted alkyl, halo, hydroxyl, alkoxy, aryl, substituted aryl, aryloxy, and aralkyloxy;

L is selected from the group consisting of:



wherein:

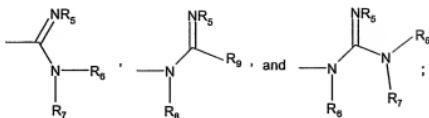
X is selected from the group consisting of O, S, NR<sub>4</sub>, Se, and Te, wherein

R<sub>4</sub> is selected from the group consisting of H, alkyl, and substituted alkyl;

each q is independently an integer from 0 to 4;

each R<sub>2</sub> is independently selected from the group consisting of alkyl, substituted alkyl, halo, hydroxyl, alkoxy, aryl, substituted aryl, aryloxy, and aralkyloxy; and

A<sub>1</sub> and A<sub>2</sub> are each independently selected from the group consisting of:



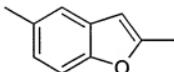
wherein:

$R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ , and  $R_9$  are each independently selected from the group consisting of H, alkyl, substituted alkyl, cycloalkyl, aryl, substituted aryl, aralkyl, hydroxyl, alkoxy, hydroxyalkyl, hydroxycycloalkyl, alkoxyycloalkyl, aminoalkyl, acyloxy, alkylaminoalkyl, and alkoxy carbonyl; or

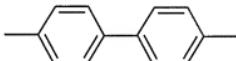
$R_5$  and  $R_6$  together represent a  $C_2$  to  $C_{10}$  alkyl,  $C_2$  to  $C_{10}$  hydroxyalkyl, or  $C_2$  to  $C_{10}$  alkylene; or a pharmaceutically acceptable salt thereof.

11. (Withdrawn) The method of Claim 10, wherein Y is NH and Z is N.

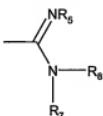
12. (Withdrawn) The method of Claim 10, wherein L comprises:



13. (Withdrawn) The method of Claim 10, wherein L comprises:



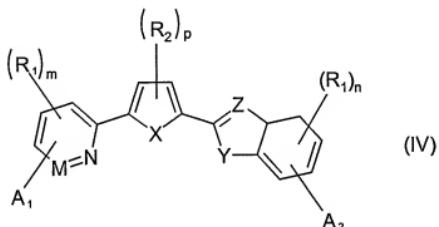
14. (Withdrawn) The method of Claim 10, wherein each  $A_1$  and  $A_2$  comprise



and wherein R<sub>6</sub> and R<sub>7</sub> are independently selected from the group consisting of H, alkyl, substituted alkyl, and cycloalkyl; and R<sub>5</sub> is selected from the group consisting of H, hydroxyl, and alkoxy.

15. (Withdrawn) The method of Claim 10, wherein the compound is selected from the group consisting of 4,4'-Bis[2-[(4-amidino)benzimidazoyl]]biphenyl and 2,5-Bis[2-[5-(N-isopropylamidino)benzimidazoyl]]benzo[b]furan.

16. (Currently amended) The method of Claim 1, wherein the compound of Formula (I) comprises a compound of Formula (IV):



wherein:

M, N and Z and N are each independently selected from the group consisting of N and  $\text{CH}_3$ ;

Z is N;

Y is selected from the group consisting of  $\text{NR}_3$ —O, S, Se, and Te, wherein  $\text{R}_3$  is selected from the group consisting of H, alkyl, and substituted alkyl;

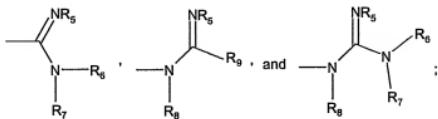
m is an integer from 0 to 2;

$n$  is an integer from 0 to 3;

p is an integer from 0 to 2;

each  $R_1$  and  $R_2$  is independently selected from the group consisting of alkyl, substituted alkyl, halo, hydroxyl, alkoxy, aryl, substituted aryl, aryloxy, and aralkyloxy;

X is selected from the group consisting of O, S, NR<sub>4</sub>, Se, and Te, wherein R<sub>4</sub> is selected from the group consisting of H, alkyl, and substituted-alkyl; and A<sub>1</sub> and A<sub>2</sub> are each independently selected from the group consisting of:



wherein:

R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, and R<sub>9</sub> are each independently selected from the group consisting of H, alkyl, substituted alkyl, cycloalkyl, aryl, substituted aryl, aralkyl, hydroxyl, alkoxy, hydroxyalkyl, hydroxycycloalkyl, alkoxyycloalkyl, aminoalkyl, acyloxy, alkylaminoalkyl, and alkoxy carbonyl; or

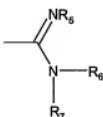
R<sub>5</sub> and R<sub>6</sub> together represent a C<sub>2</sub> to C<sub>10</sub> alkyl, C<sub>2</sub> to C<sub>10</sub> hydroxyalkyl, or C<sub>2</sub> to C<sub>10</sub> alkylene; or a pharmaceutically acceptable salt thereof.

17. (Canceled)

18. (Currently amended) The method of Claim 16, wherein Y is NH and Z is N.

19. (Canceled)

20. (Currently amended) The method of Claim 16, wherein A<sub>1</sub> and A<sub>2</sub> are each comprise:



wherein R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub> are each H.

21. (Original) The method of Claim 16, wherein the compound is 2-(4-Amidinophenyl)-5-[2-(5-amidinobenzimidazoyl)]thiophene.

22. (Original) The method of Claim 1, wherein the trichomoniasis infection is caused by the protozoan parasite *Trichomonas vaginalis*.

23. (Currently amended) The method of Claim 1, wherein the compound of Formula (I) ~~comprises~~ is a prodrug.

24. (Original) The method of Claim 1, wherein the compound of Formula (I) is administered in the form of a pharmaceutically acceptable salt.

25. (Currently amended) The method of Claim 24, wherein the pharmaceutically acceptable salt ~~comprises~~ is a hydrochloride salt.

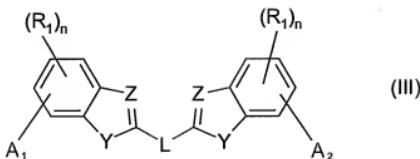
26. (Original) The method of Claim 1, wherein the subject is a human.

27. (Original) The method of Claim 1, comprising administering the compound of Formula (I) orally in one of a solid or a liquid formulation.

28. (Original) The method of Claim 1, comprising administering the compound in a liposomal formulation.

29. (Original) The method of Claim 1, comprising administering the compound of Formula (I) to prevent or reduce the incidence of recurrence of the *T. vaginalis* infection.

30. (Withdrawn) A compound of Formula (III):



wherein:

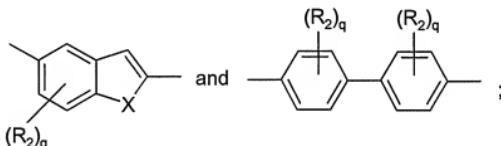
Y is selected from the group consisting of NR<sub>3</sub>, O, S, Se, and Te, wherein R<sub>3</sub> is selected from the group consisting of H, alkyl, and substituted alkyl;

Z is selected from the group consisting of CH and N;

each n is independently an integer from 0 to 3;

each R<sub>1</sub> is independently selected from the group consisting of alkyl, substituted alkyl, halo, hydroxyl, alkoxy, aryl, substituted aryl, aryloxy, and aralkyloxy;

L is selected from the group consisting of:



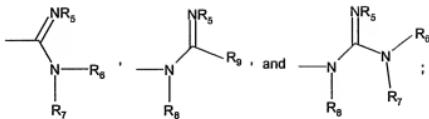
wherein:

X is selected from the group consisting of O, S, NR<sub>4</sub>, Se, and Te, wherein R<sub>4</sub> is selected from the group consisting of H, alkyl, and substituted alkyl;

each q is independently an integer from 0 to 4;

each R<sub>2</sub> is independently selected from the group consisting of alkyl, substituted alkyl, halo, hydroxyl, alkoxy, aryl, substituted aryl, aryloxy, and aralkyloxy; and

A<sub>1</sub> and A<sub>2</sub> are each independently selected from the group consisting of:



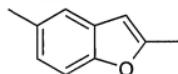
wherein:

R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, and R<sub>9</sub> are each independently selected from the group consisting of H, alkyl, substituted alkyl, cycloalkyl, aryl, substituted aryl, aralkyl, hydroxyl, alkoxy, hydroxyalkyl, hydroxycycloalkyl, alkoxyalkyl, aminoalkyl, acyloxy, alkylaminoalkyl, and alkoxy carbonyl; or

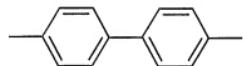
R<sub>5</sub> and R<sub>6</sub> together represent a C<sub>2</sub> to C<sub>10</sub> alkyl, C<sub>2</sub> to C<sub>10</sub> hydroxyalkyl, or C<sub>2</sub> to C<sub>10</sub> alkylene; or a pharmaceutically acceptable salt thereof.

31. (Withdrawn) The compound of Claim 30, wherein Z is N and Y is NH.

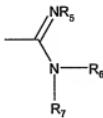
32. (Withdrawn) The compound of Claim 30, wherein L comprises:



33. (Withdrawn) The compound of Claim 30, wherein L comprises:



34. (Withdrawn) The compound of Claim 30 wherein A<sub>1</sub> and A<sub>2</sub> each comprise:



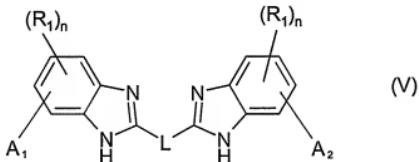
wherein R<sub>6</sub> and R<sub>7</sub> are independently selected from the group consisting of H, alkyl, substituted alkyl and cycloalkyl; and R<sub>5</sub> is selected from the group consisting of H, hydroxyl, and alkoxy.

35. (Withdrawn) The compound of Claim 30, wherein the compound is selected from the group consisting of 4,4'-Bis[2-[(4-amidino)benzimidazoyl]]biphenyl, 2,5-Bis[2-[5-(N-isopropylamidino)benzimidazoyl]]benzo[b]furan, and pharmaceutically acceptable salts thereof,

36. (Withdrawn) A compound of Claim 30, wherein the pharmaceutically acceptable salt is a hydrochloride salt.

37. (Withdrawn) A pharmaceutical formulation comprising:  
(a) a compound of Formula (III); and  
(b) a pharmaceutically acceptable carrier.

38. (Withdrawn) A method of preparing a compound of Formula (V):

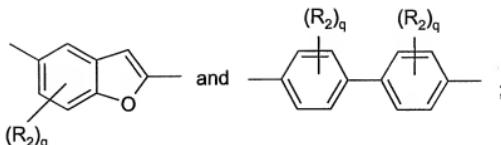


wherein:

each n is independently an integer from 0 to 3;

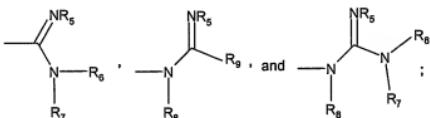
each R<sub>1</sub> is independently selected from the group consisting of alkyl, substituted alkyl, halo, hydroxyl, alkoxy, aryl, substituted aryl, aryloxy, and aralkyloxy;

L is selected from the group consisting of:



wherein each q is independently an integer from 0 to 4 and each R<sub>2</sub> is independently selected from the group consisting of alkyl, substituted alkyl, halo, hydroxyl, alkoxy, aryl, substituted aryl, aryloxy, and aralkyloxy; and

A<sub>1</sub> and A<sub>2</sub> are each independently selected from the group consisting of:



wherein:

R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, and R<sub>9</sub> are each independently selected from the group consisting of H, alkyl, substituted alkyl, cycloalkyl, aryl, substituted aryl, aralkyl, hydroxyl, alkoxy, hydroxylalkyl, hydroxycycloalkyl, alkoxyycloalkyl, aminoalkyl, acyloxy, alkylaminoalkyl, and alkoxy carbonyl; or

R<sub>5</sub> and R<sub>6</sub> together represent a C<sub>2</sub> to C<sub>10</sub> alkyl, C<sub>2</sub> to C<sub>10</sub> hydroxylalkyl, or C<sub>2</sub> to C<sub>10</sub> alkylene;

the method comprising refluxing a mixture of a dialdehyde, two molar equivalents of a diamine and two molar equivalents of an aromatizing reagent in a polar, protic solvent to form a compound of Formula (V).

39. (Withdrawn) The method of Claim 38, wherein the dialdehyde is selected from the group consisting of 4,4'-diformyl-1,1'-biphenyl and benzo[b]furan-2,5-dicarboxaldehyde.

40. (Withdrawn) The method of Claim 38, wherein the diamine is selected

from the group consisting of 4-amidino-1,2-phenylenediamine and 4-*N*-isopropylamidino-1,2-phenylenediamine.

41. (Withdrawn) The method of Claim 38, wherein the aromatizing reagent comprises 1,4-benzoquinone.

42. (Withdrawn) The method of Claim 38, wherein the polar, protic solvent comprises ethanol.

43. (Withdrawn) The method of Claim 38, comprising:

- (a) dissolving the compound of Formula (V) in a solvent to form a reaction mixture; and
- (b) treating the reaction mixture with a solvent saturated with HCl to form a hydrochloride salt of the compound of Formula (V).